

C l a i m s

1. A method of controlling drilling fluid pressure during drilling offshore, where drilling fluid is pumped down into a borehole (15) and then flows back to a drilling
5 rig (1) via the lined and/or unlined sections of the borehole (15) and a liner (14), and where the drilling fluid pressure is controlled by pumping drilling fluid out of the liner (14) near the seabed, c h a r a c -
t e r i z e d i n that the annulus (30) of the
10 liner (14) above the drilling fluid is filled with a riser fluid having a density which is lower than that of the drilling fluid.
2. A method in accordance with Claim 1, c h a r a c -
t e r i z e d i n that the volume of riser fluid
15 flowing into and out of the annulus (30) is monitored.
3. A method in accordance with Claim 2, c h a r a c -
t e r i z e d i n that the volume of drilling
fluid and riser fluid flowing into and out of the annu-
lus (30) is compared with the drilling fluid volume be-
20 ing introduced into the borehole (15) via a drill string
(16).
4. A device for controlling drilling fluid pressure during
drilling offshore, where drilling fluid is pumped down
into a borehole (15) and then flows back to a drilling
25 rig (1) via the lined and/or unlined sections of the
borehole (15) and a liner (14), and where the drilling
fluid pressure is controlled by pumping drilling fluid

out of the liner (14) near the seabed, c h a r a c -
t e r i z e d i n that the annulus (30) of the
liner (14) above the drilling fluid is filled with a
riser fluid having a density which is lower than that of
5 the drilling fluid.

5. A device in accordance with Claim 4, c h a r a c -
t e r i z e d i n that the annulus (30) communi-
cates with a tank (26) on the drilling rig (1) by means
of a connecting pipe (28), the connecting pipe (28) be-
10 ing fitted with volume measuring equipment.